IPL T S Series

One, Two, Four, and Six Serial Port IP Link® Ethernet Control Interfaces

COMMON FEATURES

- **Support for bi-directional RS-232, RS-422, and RS-485 serial communication** — For remotely and proactively monitoring and troubleshooting projectors, plasma displays, switchers, and other serially controlled devices. Note: The IPL T S 1 supports RS-232 only.
- **Serial port pass-through** — Two-, four-, and six-port models can be configured for pass-through mode, enabling each pair of ports on the interfaces to pass through commands and control a single device.
- **Enables Web-based A/V asset management** — When used with GlobalViewer software, IP Link interfaces provide a powerful, flexible way to manage, monitor, and control projectors, flat-panel displays, and other devices using a standard Ethernet network.
- **Integral high performance Web server** — Each IP Link interface features a built-in Web server with memory available for storing device drivers, GlobalViewer, and custom user Web pages.
- **Supports industry standard Ethernet protocols** — All IP Link models use industry standard Ethernet communication protocols, including ARP, DHCP, ICMP, UDP/IP, TCP/IP, Telnet, HTTP, and SMTP.
- **Simultaneous multi-user support** — Each IP Link device supports multiple concurrent users, improving system throughput.
- **E-mail capabilities enable proactive support** — With e-mail notification, technical support administrators can receive failure and service messages through an e-mail enabled cell phone, PDA, pager, or Internet e-mail account.
- **Multiple levels of access with password protection** — User access level authorizes limited entry to only pre-designated functions, while administrator access level permits full access to advanced settings.
- **Free, easy-to-use configuration utility** — Global Configurator software, a free Windows®-based configuration utility, makes product setup simple and intuitive – no programming knowledge is required.
- **Extensive library of device drivers** — Device drivers allow Extron products to control various display and source devices, such as projectors, flat-panel displays, and DVD players. Extron has produced thousands of fully tested and uniformly modeled RS-232 and IR device drivers.
- **Internal real-time clock** — Programmable operating alerts, sequencing, and automatic monitoring, together with the real-time clock and calendar, allow IP Link interfaces to routinely check configured devices.
- **Supports Power over Ethernet, PoE 802.3af** — Power over Ethernet is a technology for wired Ethernet networks that allows the electrical current necessary for the operation of compliant devices to be carried by the data cables rather than by power cords. Note: The IPL T S1 does not support PoE.
- **Plenum rated enclosure, excluding external power supply**
- **External international power supply included**, part # 70-055-01

DESCRIPTION

The Extron **IPL T S Series** of compact Ethernet control interfaces feature an integral high performance Web server and are designed to integrate IP - Internet Protocol connectivity into A/V systems, giving users the ability to remotely and proactively monitor and troubleshoot projectors, flat-panel displays, switchers, and other serially controlled products.

The IPL T S Series uses Extron's exclusive IP Link® technology, a high performance intelligent network integration solution specifically engineered to meet the needs of professional A/V environments, from large universities and businesses to small home installations. Multiple Ethernet-enabled A/V products can be managed and supported using a networked computer running Internet Explorer 6.0 or later.

E-mail Capabilities for Proactive Service

With e-mail notification, technical support administrators can receive failure and service messages through an e-mail enabled cell phone, PDA, pager, or Internet e-mail account. For secure installations that do not allow Internet access, online monitoring can still be performed proactively. Within an existing secure infrastructure, e-mail notification of failures and repairs is possible without compromising the security of the A/V systems and facility.

GlobalViewer™ Web-based Asset Management Application

Extron GlobalViewer is the free, Web-based, asset management and control application designed specifically for IP Link Ethernet network interfaces. GlobalViewer enables asset management functions that include proactive maintenance event scheduling, remote technical support, and theft alerts.

IPL T S Models

Model	Port Type		RS-232	RS-422	RS-485
	9-pin D Sub	Captive Screw			
IPL T S1	1		●		
IPL T S2	2*	2	●	●	●
IPL T S4	4		●	●	●
IPL T S6	2	4**	●	●	●

* The IPL T S2 includes two captive screw ports that are connected in parallel with the 9-pin ports.
** The captive screw ports on the IPL T S6 are only compatible with RS-232 serial communication.

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IPL T S Series

IPL T S1 NEW

One Serial Port IP Link® Ethernet Control Interface

UNIQUE FEATURES

- One bi-directional RS-232 serial port
- Low-profile form factor
- Optional MBU 125 1U, 1/2 Rack Width, Under-Desk Mount Kit available, part # 70-077-01

MODEL	VERSION DESCRIPTION	PART #
IPL T S1	One serial port	60-801-01

IPL T S2

Two Serial Port IP Link® Ethernet Control Interface

UNIQUE FEATURES

- Two bi-directional RS-232, RS-422, or RS-485 serial ports
- NEW 7.25 MB of available flash memory
- Support for Power over Ethernet

MODEL	VERSION DESCRIPTION	PART #
IPL T S2	Two serial ports	60-544-81

IPL T S4

Four Serial Port IP Link® Ethernet Control Interface

UNIQUE FEATURES

- Four bi-directional RS-232, RS-422, or RS-485 serial ports
- NEW 7.25 MB of available flash memory
- Support for Power over Ethernet

MODEL	VERSION DESCRIPTION	PART #
IPL T S4	Four serial ports	60-544-83

IPL T S6

Six Serial Port IP Link® Ethernet Control Interface

UNIQUE FEATURES

- Six bi-directional RS-232, RS-422, or RS-485 serial ports
- NEW 7.25 MB of available flash memory
- Support for Power over Ethernet

MODEL	VERSION DESCRIPTION	PART #
IPL T S6	Six serial ports	60-544-84

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IPL T S Series

IPL T S Series Accessories

OPTIONAL ACCESSORIES	MODEL DESCRIPTION	PAGE	PART #
RSU 129	1U 9.5" Deep Universal Rack Shelf Kit	page 759	60-190-01
RSF 123	1U 3.5" Deep VersaTools® Rack Shelf Kit	page 758	60-190-20
MBU 125	1U, 1/2 & 1/4 Rack Width, Under-Desk Mount Kit for Two-Piece Enclosure	page 756	70-077-01
MBU 123	VersaTools® Mini Under-Desk Mount Kit	page 756	70-212-01
PMK 100	One VersaTools®, 1/4 Rack Width Mini Projector Mounting Kit	page 752	70-217-01
PMK 200	1U, 1/2 & 1/4 Rack Width Projector Mounting Kit for Two-Piece Enclosure	page 754	70-077-04

SPECIFICATIONS

ETHERNET CONTROL INTERFACE

Connectors 1 RJ-45 female connector
Data rate 10/100Base-T, half/full duplex with autodetect
Protocols ARP, DHCP, ICMP (ping), TCP/IP, UDP/IP, Telnet, HTTP, SMTP
Default settings Link speed and duplex level = autodetected
IP address = 192.168.254.254
Subnet mask = 255.255.0.0
Gateway = 0.0.0.0
DHCP = off

Web server
IPL T S1 Up to 200 simultaneous sessions
1.25 MB nonvolatile user memory
All other models Up to 200 simultaneous sessions
7.25 MB nonvolatile user memory
Program control Extron's Simple Instruction Set (SIS™)
Global Viewer requirements Microsoft® Internet Explorer ver. 6 or higher

SERIAL CONTROL INTERFACE

Quantity / Type
IPL T S1 1 RS 232-only
IPL T S2 2 RS-232/RS-422/RS-485 configurable serial
IPL T S4 4 RS-232/RS-422/RS-485 configurable serial
IPL T S6 2 RS-232/RS-422/RS-485 configurable serial and 4 RS-232-only
Connectors
IPL T S1 (1) 9-pin male D
IPL T S2 (2) 9-pin male D and (1) 3.5 mm captive screw connector, 5 pole
IPL T S4 (4) 9-pin male D
IPL T S6 (2) 9-pin male D and (1) 3.5 mm captive screw connector, 10 pole
Baud rate and protocol 300 to 115200 baud
Default settings (adjustable): 9600 baud, 8 data bits, 1 stop bit, no parity

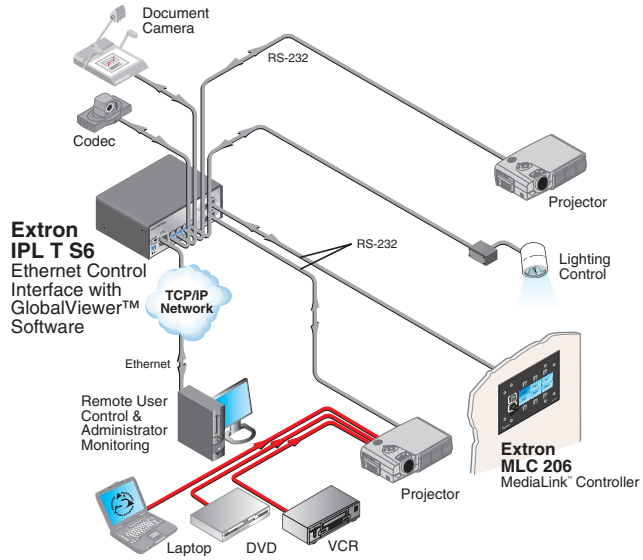
Pin configurations
Serial, 9-pin D (IPL T S1)
RS 232 2 = RX, 3 = TX, 5 = GND, 7 = RTS, 8 = CTS
Serial, 9-pin D
(IPL T S2, IPL T S4)
RS-232 (default) 2 = RX, 3 = TX, 5 = GND, 7 = RTS, 8 = CTS
RS-422 2 = RX-, 3 = TX-, 5 = GND, 7 = TX+, 8 = RX+
RS-485 2&3 (tied together) = data-, 5 = GND, 7&8 (tied together) = data+
Serial, 5-pole captive screw
(IPL T S2) COM1: pin 1 = TX, 2 = RX, 3 = GND
COM2: pin 4 = TX, 5 = RX, 3 = GND
Serial, 10-pole captive screw
(IPL T S6) COM3: pin 1 = TX, 2 = RX, 3 = GND
COM4: pin 4 = TX, 5 = RX, 3 = GND
COM5: pin 6 = TX, 7 = RX, 8 = GND
COM6: pin 9 = TX, 10 = RX, 8 = GND

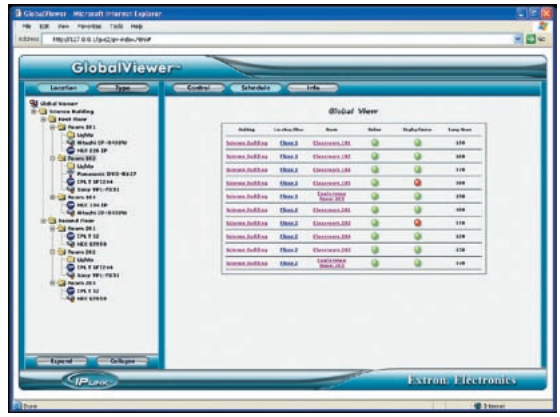
GENERAL

Power Supplied by an included external power supply
Alternatively, the product can use power supplied over LAN/Ethernet (802.3af, class 2).
External power supply 100 VAC to 240 VAC, 50/60 Hz, external, autoswitchable; to 12 VDC, 1 A, regulated
Power input requirements 12 VDC, 0.5 A (max.)
Temperature / Humidity Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing
Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing

Rack mount
IPL T S1 Yes, with optional 1U 9.5" deep rack shelf kit, part #60-190-01; or the 1U 3.5" deep VersaTools® rack shelf kit, part #60-190-20. Also under-furniture mountable with optional kit #70-077-01 or projector mountable with optional kit #70-077-04
All other models Yes, with optional 1U 9.5" deep rack shelf kit, part #60-190-01; or the 1U 3.5" deep VersaTools® rack shelf kit, part #60-190-20. Also under-furniture mountable with optional bracket kit #70-212-01 or projector mountable with optional bracket kit #70-217-01
Enclosure type Metal
Enclosure dimensions
IPL T S1 1.0" H x 4.3" W x 3.0" D (1U high, quarter rack wide)
2.5 cm H x 10.9 cm W x 7.6 cm D
(Depth excludes connectors.)
All other models 1.7" H x 4.3" W x 3.0" D (1U high, quarter rack wide)
4.3 cm H x 10.9 cm W x 7.6 cm D
(Depth excludes connectors.)
Product / Shipping weight 0.7 lbs (0.3 kg) / 2 lbs (1 kg)
Vibration ISTA 1A in carton (International Safe Transit Association)
Listings UL, CUL (UL rated for use in a plenum air space: meets UL2043 and UL60950 for fire and smoke)
Compliances CE, FCC Class A, VCCI, AS/NZS, ICES
MTBF 30,000 hours
Warranty 3 years parts and labor

NOTE: All nominal levels are at ±10%. Specifications are subject to change without notice.





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